



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,439	12/06/2001	Harold J. Plourde JR.	A-7314	5248
5642 7590 01/27/2009 SCIENTIFIC-ATLANTA, INC. INTELLECTUAL PROPERTY DEPARTMENT 5030 SUGARLOAF PARKWAY LAWRENCEVILLE, GA 30044				
EXAMINER				
CHOI, MICHAEL P				
ART UNIT		PAPER NUMBER		
2621				
NOTIFICATION DATE		DELIVERY MODE		
01/27/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail@sciatl.com

Office Action Summary

Application No.

10/008,439

Applicant(s)

PLOURDE ET AL.

Examiner

Michael Choi

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-50 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/CDC)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 9/9/08 have been fully considered but they are not persuasive.

As per remarks on pages 19-25, applicant argues that Gotoh fails to teach such newly amended limitations. In response, Gotoh teaches such limitations "stored in the memory, the management file comprising a data structure that includes information identifying a corresponding media content instance of the media content instances (in at least Paragraphs [0032,0033,0161])" as recited in claim 1 and "representing each of the buffered media content instances as a management file in a memory separate from the buffer space (Fig. 3 – processing memory having various other sub-memories, 751-757)" as in claim 26.

As per remarks on pages 26-31, applicant argues that there is no evidence for status flags in management files. In response, Ellis teaches a status flag (Paragraph [0034]), and a media content instance file name (Paragraphs [0337,0378]) wherein it would have been obvious to one of ordinary skill in the art at the time the invention was made to have encoded logic for smooth playback when device acknowledges clear destination of allocation thereby creating smooth buffering with an enlarged buffering capacity for important storage tasks.. Further, the fact that applicant has recognized a separate advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

As such, all applicable rejections are maintained, no claims are allowed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 6, 9, 10, 19, 22, 26-29, 31, 34, 35, 44 and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Gotoh et al. (US 2001/0043800 A1).

Regarding Claim 1, Gotoh et al. teaches a media content recording system in a subscriber network television system, comprising:

- a memory for storing logic (Fig. 9, 805 – memory);
- a storage device comprising a buffer space for continuously buffering media content instances (Fig. 9, 805 - system processing memory; Paragraphs [0002]); and
- a processor configured with the logic to represent each of the media content instances in the buffer space as a respective management file (Fig 9, 804 - processing station having structure processing section; Paragraphs [0055,0062]) stored in the memory, the management file comprising a data structure that includes information identifying a corresponding media content instance of the media content instances (in at least Paragraphs [0032,0033,0161]).

Regarding Claim 2, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic to represent the media content instance in the buffer space with the corresponding management file in the memory (Fig. 9, 805 - system processing memory; Paragraphs [0002]; processing station having structure processing section; Paragraphs [0055,0062]), wherein the logic is further configured to track the duration of the buffered media content instance (Paragraphs [0028,35,42,55,62]).

Regarding Claim 3, Gotoh et al. teaches the system of claim 2, wherein the duration of the media content instance corresponds to hard disk space (Fig 9, 807 - hard disk drive; Paragraph [0219]).

Regarding Claim 4, Gotoh et al. teaches the system of claim 2, wherein the duration of the media content instance corresponds to a real-time playback duration (in at least Paragraph [0028]).

Regarding Claim 6, Gotoh et al. teaches the system of claim 5, wherein the processor is further configured with the logic to track when the buffering of the media content instance starts (in at least Fig. 6 – start of buffering).

Regarding Claim 9, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic to organize a plurality of management files as a linked list of the management files comprising the locations of data for said files and locations to a previously

created management file and to a subsequently created management file (in at least Figs. 7A, 14D, 15, 17).

Regarding Claim 10, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic to organize a plurality of management files as a linked list of pointers to the management files (in at least Figs. 7A, 14D, 15, 17).

Regarding Claim 19, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic to buffer digital broadcast media content instances, received at a communications interface, as digitally compressed media content instances (Paragraphs [0006,0282]).

Regarding Claim 22, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic to buffer digital media content instances, received at a digital communications port from a local device, as digitally compressed media content instances (in at least Paragraphs [0002,0282]).

Regarding Claim 26, Gotoh et al. teaches a media content recording method in a subscriber network television system, comprising the steps of:

- buffering media content instances into a buffer space (Fig. 9, 805 - system processing memory; Paragraphs [0002]); and
- representing each of the buffered media content instances as a management file in a memory separate from the buffer space (Fig. 3 – processing memory having various other sub-memories, 751-757).

Claim 27 is rejected under the same grounds as claim 2.

Claim 28 is rejected under the same grounds as claim 3.

Claim 29 is rejected under the same grounds as claim 4.

Claim 31 is rejected under the same grounds as claim 6.

Claim 34 is rejected under the same grounds as claim 9.

Claim 35 is rejected under the same grounds as claim 10.

Claim 44 is rejected under the same grounds as claim 19.

Claim 47 is rejected under the same grounds as claim 22.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 7, 8, 11-18, 20, 21, 23-25, 30,32, 33, 36-43, 45, 46 and 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotoh et al. (US 2001/0043800 A1) in view of Ellis et al. (US 2002/0174430 A1).

Regarding Claim 5, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic but fails to explicitly teach to receive media content information from a remote server, wherein the media content information comprises a scheduled media content instance start time and a scheduled media content instance end time. Ellis et al. teaches to receive media content information from a remote server (Paragraphs [0045,0157,0161,0174]), wherein the media content information comprises a scheduled media

content instance start time and a scheduled media content instance end time (in at least Fig. 8 – wherein each program has a start and end time).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 7, Gotoh et al. teaches the system of claim 5, wherein the processor is further configured with the logic but explicitly fails to teach to determine the media content instance duration by subtracting the media content instance buffering start time from the scheduled media content instance end time. Ellis et al. teaches to determine the media content instance duration by subtracting the media content instance buffering start time from the scheduled media content instance end time (in at least Figs. 6,9,10 – buffering before and after time).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 8, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic to configure the data structure to include media content instance guide data, a buffering start time, an active playback location within the media content instance in the buffer space, a status flag, and a media content instance file name. Ellis et al. teaches wherein the processor is further configured with the logic to configure each of the management files as a data structure that includes media content instance guide data (in at least Abstract), a buffering start time (in at least Figs. 94,97,101,113 – start when tuned to

channel), an active playback location within the media content instance in the buffer space (in at least Figs. 94,97,101,113), a status flag (Paragraph [0034]), and a media content instance file name (Paragraphs [0337,0378]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 11, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic but fails to explicitly teach to use and store the scheduled stop time of a media content instance from media content instance guide data to determine when to close the management file for said ended media content instance and open a new management file for the next media content instance to be downloaded to the buffer space. Ellis et al. teaches to use and store the scheduled stop time of each of the media content instances from the media content instance guide data to determine when to close the management file for an ended media content instance and open a new management file for a next media content instance to be downloaded to the buffer space (in at least Fig. 5 - record program by time, wherein acknowledgement of start and end time is included)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation having times with buffering capacity.

Regarding Claim 12, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic but fails to explicitly teach to use the receipt time of a media content instance into the buffer space by using the start time as indicated by an internal clock.

Ellis et al. teaches to use the receipt time of a media content instance into the buffer space by using the start time as indicated by an internal clock (Paragraph [0021] – recording into buffer during present time).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation having times with buffering capacity.

Regarding Claim 13, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic but fails to explicitly teach to configure each of the media content instances as media content instance files, wherein the processor is further configured with the logic to identify each of the media content instance files by file names. Ellis et al. teaches to identify the media content instance files by file names (Paragraphs [0159,0337,0378])

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 14, Gotoh et al. teaches the system of claim 13, wherein the processor is further configured with the logic but fails to explicitly teach to randomly generate the file names of each of the media content instance files. Ellis et al. teaches to randomly generate the file names of each of the media content instance files (in at least Fig. 5, 7, 8 – generating list as arbitrated by category and time).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 15, Gotoh et al. teaches the system of claim 13, wherein the processor is further configured with the logic but fails to explicitly teach to generate the media content instance file names using the media content instance guide data. Ellis et al. teaches to generate the media content instance file names using the media content instance guide data (in at least Figs. 7, 8+)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 16, Gotoh et al. teaches the system of claim 15, but fails to explicitly teach wherein each of the media content instance file names include channel number, media content instance title, and the source of the media content instance. Ellis et al. teaches wherein each of the media content instance file names include channel number, media content instance title, and the source of the media content instance (in at least Fig. 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 17, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic but fails to explicitly teach to buffer analog broadcast media

content instances, received at a communications interface, as digitally compressed media content instances. Ellis et al. teaches logic to buffer analog broadcast media content instances, received at a communications interface, as digitally compressed media content instances (Paragraphs [0004,0162,0163]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 18, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic but fails to explicitly teach to buffer an analog signal received at a connector from a consumer electronics device, as a digitally compressed media content instance. Ellis et al. teaches to buffer an analog signal received at a connector from a consumer electronics device, as a digitally compressed media content instance (Paragraphs [0004,0162,0163]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 20, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic but fails to explicitly teach to buffer digital media-on-demand media content instances, received at a communications interface from a remote server, as digitally compressed media content instances. Ellis et al. teaches to buffer digital media-on-demand media content instances, received at a communications interface from a remote server,

as digitally compressed media content instances (Paragraphs [0012,0161,0425,0434]; Figs. 1-2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 21, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic but fails to explicitly teach to buffer digital media content instances, received at a digital communications port from a local network, as digitally compressed media content instances. Ellis et al. teaches to buffer digital media content instances, received at a digital communications port from a local network, as digitally compressed media content instances (Paragraphs [0012,0161,0425,0434]; Figs. 1-2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 23, Gotoh et al. teaches the system of claim 1, wherein the processor is further configured with the logic but fails to explicitly teach to maintain a status flag in the management file wherein the status flag is configured as temporary for a buffered media content instance that is not designated for permanent recording. Ellis et al. teaches teach to maintain a status flag in the management file wherein the status flag is configured as temporary for a buffered media content instance that is not designated for permanent recording (in at least Figs. 94,97,101,113 – start when tuned to channel; Paragraphs [0034, 0337,0378]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 24, Gotoh et al. teaches the system of claim 23, wherein the processor is further configured with the logic but fails to explicitly teach to configure the status flag of the management file for a buffered media content instance as permanent when the user requests that said media content instance be permanently recorded, wherein the processor is further configured with the logic to cause the permanently recorded media content instance to have a permanent designation in a file allocation table in response to having status flag of the corresponding management file configured as permanent, such that the buffer space storing the permanently recorded media content instance becomes designated as non-buffer space. Ellis et al. teaches teach to configure the status flag of the management file for a buffered media content instance as permanent when the user requests that said media content instance be permanently recorded, wherein the processor is further configured with the logic to cause the permanently recorded media content instance to have a permanent designation in a file allocation table in response to having status flag of the corresponding management file configured as permanent, such that the buffer space storing the permanently recorded media content instance becomes designated as non-buffer space (in at least Figs. 94,97,101,113 – start when tuned to channel; Paragraphs [0034, 0337,0378]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity.

Regarding Claim 25, Gotoh et al. teaches a media content recording system in a subscriber network television system, comprising:

- a memory for storing logic (Fig. 9, 805 – memory);
- a storage device comprising a buffer space for continuously buffering media content instances (Fig. 9, 805 - system processing memory; Paragraphs [0002]); and
- a processor configured with the logic to buffer media content instances into the buffer space (Fig 9, 804 - processing station having structure processing section; Paragraphs [0055,0062]),
 - wherein the processor is further configured with the logic to represent the media content instances in the buffer space as a linked list of management files in the memory (Fig 9, 804 - processing station having structure processing section; Paragraphs [0055,0062]),
 - wherein the logic is further configured to track the duration of the buffered media content instance (Paragraphs [0028,35,42,55,62],
 - wherein the duration of the media content instance corresponds to hard disk space (Fig 9, 807 - hard disk drive; Paragraph [0219]),
 - wherein the management files comprise the locations of data for said files and locations to a previously created management file and to a subsequently created management file (Fig. 15, 17),
 - wherein the processor is further configured with the logic to track when the buffering of the media content instance starts (in at least Fig. 6 – start of buffering),
 - wherein the processor is further configured with the logic to organize a plurality of management files as a linked list of the management files comprising the

locations of data for said files and locations to a previously created management file and to a subsequently created management file (in at least Figs. 7A, 14D, 15, 17),

- o wherein the processor is further configured with the logic to configure the media content instances as media content instance files (Paragraph [0002] – recording programs as files),
- o wherein the processor is further configured with the logic to buffer digital broadcast media content instances, received at a communications interface, as digitally compressed media content instances (Paragraphs [0006,0282]),
- o wherein the processor is further configured with the logic to buffer digital media content instances, received at a digital communications port from a local device, as digitally compressed media content instances (in at least Paragraphs [0002,0282]).

Gotoh et al. fails to explicitly teach:

- o wherein the processor is further configured with the logic to configure each of the management files as a data structure that includes media content instance guide data, a buffering start time an active playback location within the media content instance in the buffer space, a status flag (Paragraph [0034]), and a media content instance file name,
- o wherein the processor is further configured with the logic to use and store the scheduled stop time of each of the media content instances from the media content instance guide data to determine when to close the management file for an ended media content instance and open a new management file for a next media content instance to be downloaded to the buffer space,

- wherein the processor is further configured with the logic to receive media content information from a remote server, wherein the media content information comprises a scheduled media content instance start time and a scheduled media content instance end time,
- wherein the processor is further configured with the logic to determine the media content instance duration by subtracting the media content instance buffering start time from the scheduled media content instance end time,
- wherein the processor is further configured with the logic to use the receipt time of a media content instance into the buffer space by using the start time as indicated by an internal clock,
- wherein the processor is further configured with the logic to identify the media content instance files by file names,
- wherein the processor is further configured with the logic to generate the media content instance file names using the media content instance guide data,
- wherein each of the media content instance file names include channel number, media content instance title, and the source of the media content instance,
- wherein the processor is further configured with the logic to access the media content instances by the media content instance file names,
- wherein the processor is further configured with the logic to buffer analog broadcast media content instances, received at a communications interface, as digitally compressed media content instances,
- wherein the processor is further configured with the logic to buffer an analog signal received at a connector from a consumer electronics device, as a digitally compressed media content instance,

- wherein the processor is further configured with the logic to buffer digital media-on-demand media content instances, received at a communications interface from a remote server, as digitally compressed media content instances,
- wherein the processor is further configured with the logic to buffer digital media content instances, received at a digital communications port from a local network, as digitally compressed media content instances,
- wherein the processor is further configured with the logic to maintain the status flag in the management file wherein the status flag is configured as temporary for a buffered media content instance that is not designated for permanent recording,
- wherein the processor is further configured with the logic to configure the status flag of the management file for a buffered media content instance as permanent when the user requests that said media content instance be permanently recorded,
- wherein the processor is further configured with the logic to cause the permanently recorded media content instance to have a permanent designation in a file allocation table in response to having the status flag of the corresponding management file configured as permanent, such that the buffer space storing the permanently recorded media content instance becomes designated as non-buffer space.

Ellis et al. teaches:

- wherein the processor is further configured with the logic to configure each of the management files as a data structure that includes media content instance guide data (in at least Abstract), a buffering start time (in at least Figs. 94,97,101,113 –

start when tuned to channel), an active playback location within the media content instance in the buffer space (in at least Figs. 94,97,101,113), a status flag (Paragraph [0034]), and a media content instance file name (Paragraphs [0337,0378]),

- wherein the processor is further configured with the logic to use and store the scheduled stop time of each of the media content instances from the media content instance guide data to determine when to close the management file for an ended media content instance and open a new management file for a next media content instance to be downloaded to the buffer space (in at least Fig. 5 - record program by time, wherein acknowledgement of start and end time is included),
- wherein the processor is further configured with the logic to receive media content information from a remote server (Paragraphs [0045,0157,0161,0174]), wherein the media content information comprises a scheduled media content instance start time and a scheduled media content instance end time (in at least Fig. 8 – wherein each program has a start and end time),
- wherein the processor is further configured with the logic to determine the media content instance duration by subtracting the media content instance buffering start time from the scheduled media content instance end time (in at least Figs. 6,9,10 – buffering before and after time),
- wherein the processor is further configured with the logic to use the receipt time of a media content instance into the buffer space by using the start time as indicated by an internal clock (Paragraph [0021] – recording into buffer during present time),

- wherein the processor is further configured with the logic to identify the media content instance files by file names (Paragraphs [0159,0337,0378]),
- wherein the processor is further configured with the logic to generate the media content instance file names using the media content instance guide data (in at least Figs. 7, 8+),
- wherein each of the media content instance file names include channel number, media content instance title, and the source of the media content instance (in at least Fig. 8),
- wherein the processor is further configured with the logic to access the media content instances by the media content instance file names (Paragraphs [0159,0337,0378]),
- wherein the processor is further configured with the logic to buffer analog broadcast media content instances, received at a communications interface, as digitally compressed media content instances (Paragraphs [0004,0162,0163]),
- wherein the processor is further configured with the logic to buffer an analog signal received at a connector from a consumer electronics device, as a digitally compressed media content instance (Paragraphs [0004,0162,0163]),
- wherein the processor is further configured with the logic to buffer digital media-on-demand media content instances, received at a communications interface from a remote server, as digitally compressed media content instances (Paragraphs [0012,0161,0425,0434]),
- wherein the processor is further configured with the logic to buffer digital media-on-demand media content instances, received at a communications interface

- from a remote server, as digitally compressed media content instances (Paragraphs [0012,0161,0425,0434]; Figs. 1-2),
- wherein the processor is further configured with the logic to buffer digital media content instances, received at a digital communications port from a local network, as digitally compressed media content instances (Paragraphs [0012,0161,0425,0434]; Figs. 1-2),
 - wherein the processor is further configured with the logic to maintain the status flag in the management file wherein the status flag is configured as temporary for a buffered media content instance that is not designated for permanent recording (in at least Figs. 94,97,101,113 – start when tuned to channel; Paragraphs [0034, 0337,0378]),
 - wherein the processor is further configured with the logic to configure the status flag of the management file for a buffered media content instance as permanent when the user requests that said media content instance be permanently recorded (in at least Figs. 94,97,101,113 – start when tuned to channel; Paragraphs [0034, 0337,0378]),
 - wherein the processor is further configured with the logic to cause the permanently recorded media content instance to have a permanent designation in a file allocation table in response to having the status flag of the corresponding management file configured as permanent, such that the buffer space storing the permanently recorded media content instance becomes designated as non-buffer space (in at least Figs. 94,97,101,113 – start when tuned to channel; Paragraphs [0034, 0337,0378]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have encoded logic for smooth playback when device acknowledges clear destination of allocation thereby creating smooth buffering with an enlarged buffering capacity for important storage tasks.

Claim 30 is rejected under the same grounds as claim 5.
Claim 32 is rejected under the same grounds as claim 7.
Claim 33 is rejected under the same grounds as claim 8.
Claim 36 is rejected under the same grounds as claim 11.
Claim 37 is rejected under the same grounds as claim 12.
Claim 38 is rejected under the same grounds as claim 13.
Claim 39 is rejected under the same grounds as claim 14.
Claim 40 is rejected under the same grounds as claim 15.
Claim 41 is rejected under the same grounds as claim 16.
Claim 42 is rejected under the same grounds as claim 17.
Claim 43 is rejected under the same grounds as claim 18.
Claim 45 is rejected under the same grounds as claim 20.
Claim 46 is rejected under the same grounds as claim 21.
Claim 48 is rejected under the same grounds as claim 23.
Claim 49 is rejected under the same grounds as claim 24.
Claim 50 is rejected under the same grounds as claim 25.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Choi whose telephone number is (571) 272-9594. The examiner can normally be reached on Monday - Friday 9:00AM - 5:30PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Choi/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621